

# **TRI-SERVICE VISION CONSERVATION AND READINESS**



**VISION READY IS MISSION READY**



## **Military Combat Eye Protection**

~ ~ ~ ~ ~

## **Status of Vision Readiness**



***DALE BARRETTE, O.D., F.A.A.O.  
CDR, MSC, USN***

***NAVY PROGRAM MANAGER  
TRI-SERVICE VISION CONSERVATION AND  
READINESS***

***U. S. ARMY CENTER FOR HEALTH PROMOTION AND  
PREVENTIVE MEDICINE***



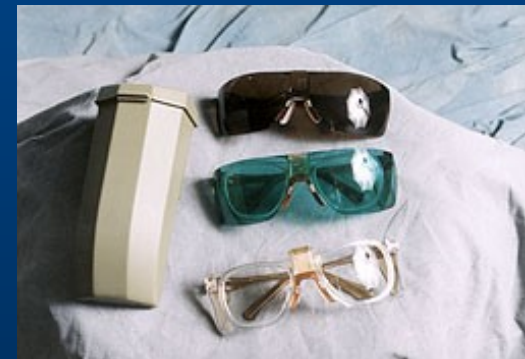
# Military Specific Eyewear

■ BLPS

■ SPECS

■ SWDG

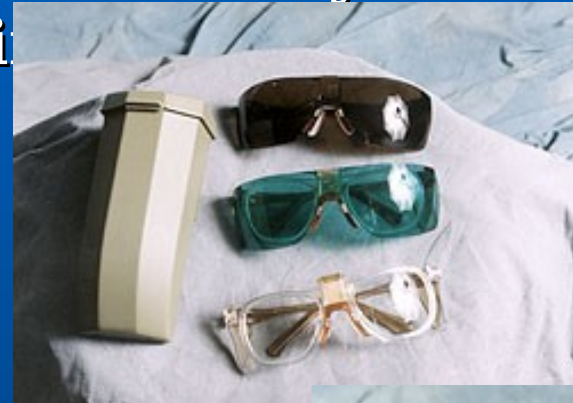
■ MEPS





# Ballistic Laser Protective Spectacles (BLPS) Special Protective Eyewear Cylindrical System (SPECS) Sun Wavelength (SWDG)

- ❑ Development began in 1980's
- ❑ Limited Fielding for Desert Storm
- ❑ B-LPS have Rx Insert
- ❑ Lenses
  - Clear and Sun
  - 2 or 3 Wavelength Laser
- ❑ Meet ANSI Z87 and Military Ballistic Fragmentation Standard







# Protect the Sight to Fight

C O M B A T   E Y E   P R O T E C T I O N   S Y S T E M S



## EYE ARMOR WEAR IT!



Protected Eyes

OR  
NOT



Unprotected Eyes

### EYE ARMOR



Trophy 30  
MFR 4240-01-010-0001



Eagle 30E 2.4  
MFR 4240-01-010-0000



Protektor Stealth  
MFR 4240-01-010-0001 (original)  
MFR 4240-01-010-0002



Dewey 30 Frame  
MFR 4240-01-010-0000



Body Space 30  
MFR 4240-01-010-0001



Pyramax Ventura 2  
MFR 4240-01-010-0001 (original)  
MFR 4240-01-010-0002



Honey W 30-1  
MFR 4240-01-010-0000



E36 Land Ops  
MFR 4240-01-010-0000



E300 Profile 30  
MFR 4240-01-010-0000



Aviator 30  
MFR 4240-01-010-0000

USACHPPM

For more information contact: [www.dodvision.com](http://www.dodvision.com)





# Approved Products List

## ■ Spectacles

- UVEX - XC
- ESS - ICE 2.4
- Revision - Sawfly USA
- Oakley - SI M Frame
- Wiley-X - SG-1 / PT-1
- Pyramex - Venture II
- Body Specs - PISTOL





# Approved Products List

## ■ Goggles

### ■ ESS

- Land Ops
- Vehicle Ops
- Profile NVG
- Flight Deck

### ■ Arena - FlakJak





# Military Combat Eye Protection Program

■ MCEP is a single umbrella program to address eye protection

■ Ballistic Protection

■ Prescription Integration

■ Laser Protection





# New Performance Standards

- ❑ Carrying Case
- ❑ Retention Strap
- ❑ Instruction booklet
- ❑ Configuration changes
  - Easy and Minimal
- ❑ Fit 5<sup>th</sup> to 95<sup>th</sup> percentile
- ❑ Ease Donning and Doffing
- ❑ Comfort
- ❑ Survivability
- ❑ Weapons Interface
- ❑ Chemical Resistance
- ❑ Temperature Extremes
  - -60 to 160 F
- ❑ Resistance to:
  - Scratching
  - Fogging
  - Wind/ Dust
- ❑ Weight
  - 1.7 oz for spectacles
  - 5.1 oz for goggles
- ❑ Prescription lenses
  - -10 to + 8 with -2.50 cyl
- ❑ Field of View
- ❑ Optical Characteristics





# Military Combat Eye Protection Program

## State of Laser Eye Protection:

- SWDG, BLPS, SPECS dye absorber lenses are readily available
- Several COTS dye absorber lenses are ready for qualification





# Military Combat Eye Protection Program

- **MEPS Phase II - Dielectric Stack / Hologram had ground troop performance and cost issues**
  - Environmental Stability, Visible Transmission, Optics, Laser protection, Multiple imaging, Glint, Installation/Removal, Weight
- **Developmental contract with Rockwell International**





# MCEP and Vision Readiness

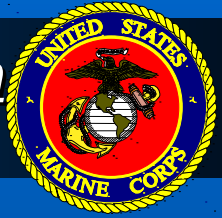
## Proposed changes:

- Replace standard military issue S-8/S-9 with ESS ICE 2 / UVEX XC / Revision Sawfly
- Include MCEP as a required optical





# *Marine Eye Protection System (MEPS)*



## ■ The Marine Eye Protection System

### ● Block I Phase II requires:

- ▶ Two levels of protection (goggles and spectacles)

## ■ ESS NVG Goggles ■ Interchangeable insert ■ ESS ICE Spectacle







# *Marine Eye Protection System (MEPS)*



- ~ 7,200 inserts supplied to II MEF Marines deploying to OIF 04-06.

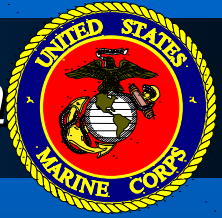
## Program Cost Fielding

## For Complete Block I Phase II

- R & D: \$ 0.5 M
  - Active: \$ 11.4 M
  - Reserve: \$ 2.9M
- |                   |
|-------------------|
| Active: \$ 2.8 M  |
| Reserve: \$ 1.9 M |



# ***Marine Eye Protection System (MEPS)***



## **■ Sustainment Responsibility transferring**

### **● CIF → TAP / CTAP**

- ▶ Consolidated Issue Facility > Training Allowance Pool / Contingency TAP

### **● At that point MEPS = Standard Issue**

- ▶ Becomes part of the body armor system
- ▶ Issued to every Marine

## **■ Future Activities - Block I Phase III**

### **● Integrates eyewear into a headbourne system**

- ▶ 4th QTR FY06

### **● Block II will incorporate laser protection**



# Air Force Protective Eyewear List (AFPEL)

- For interoperability, AF will use same products as Army
- Air Force Protective Eyewear List (AFPEL) is a pared down version of the Army Approved Product Eyewear List

Product	Spectacle	Goggle	Suitable for Airmen who do not require a prescription	Suitable for Airmen who require a prescription
UVEX XC	X		X	X <sup>1</sup>
Revision Sawfly	X		X	X <sup>1</sup>
ESS ICE-2	X		X	X <sup>1</sup>
Oakley SI M	X		X	
Wiley-X PT-1	X		X	
ESS Land Ops Goggle		X	X	X <sup>2</sup>
ESS Vehicle Ops Goggle		X	X	X <sup>2</sup>
ESS Low Profile NVG Goggle		X	X	
Arena Flak Jak		X	X	X <sup>2</sup>

<sup>1</sup> Prescription insert carrier and inserts available from NOSTRA.

<sup>2</sup> Goggle intended to be worn over FOC eyewear.



# Questions

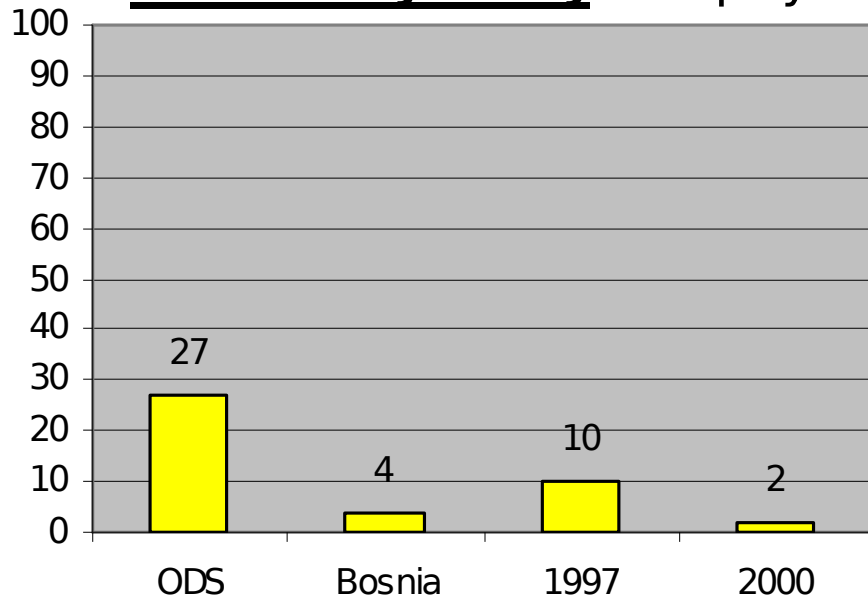






# Vision Readiness Studies

Percent of DOD personnel  
**Not Visually Ready** to deploy



20/20

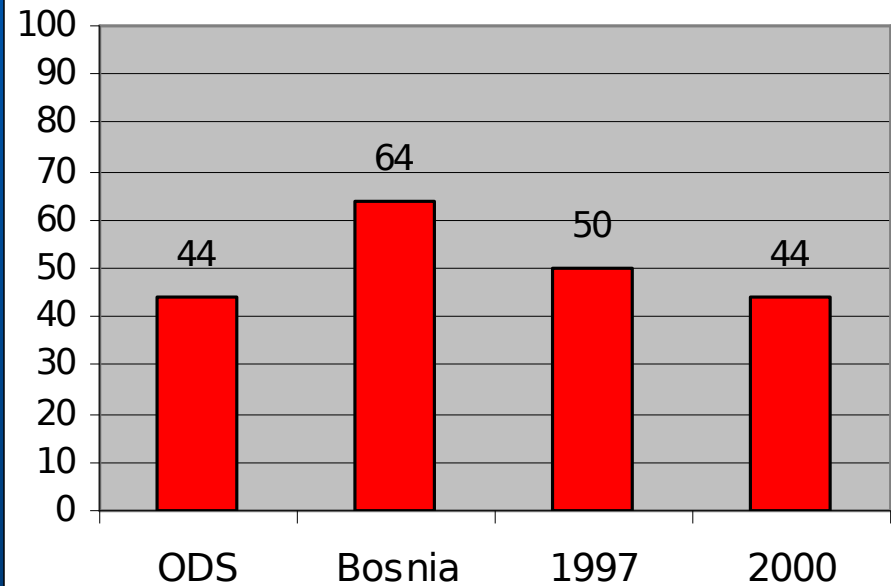
20/30

MO S

20/40

Visual Acuity Requirement

Percent of spectacle wearers  
**Not Optically Ready** to deploy



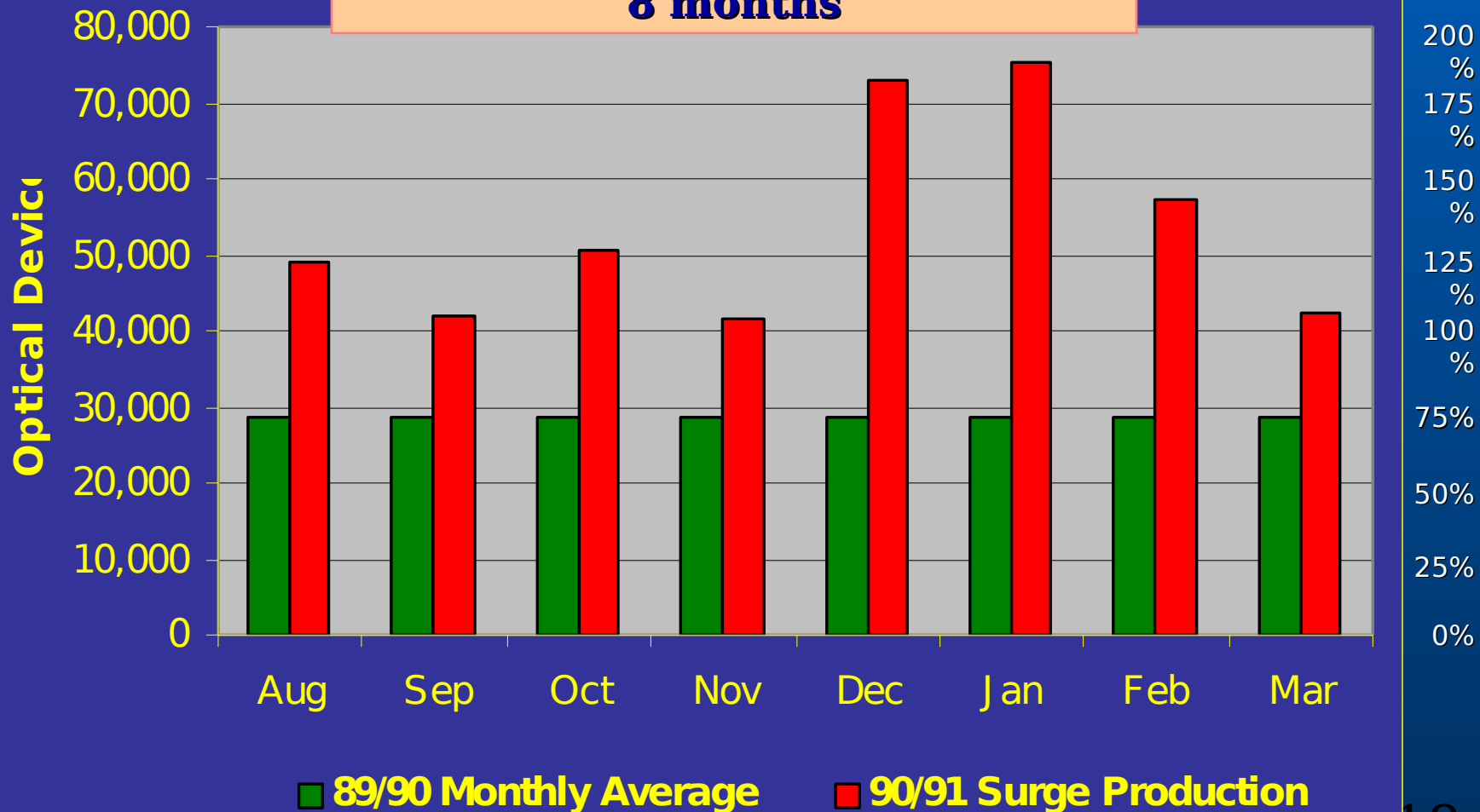
2 pr Spectacles

1 pr Mask Inserts



# ODS: OFE Surge

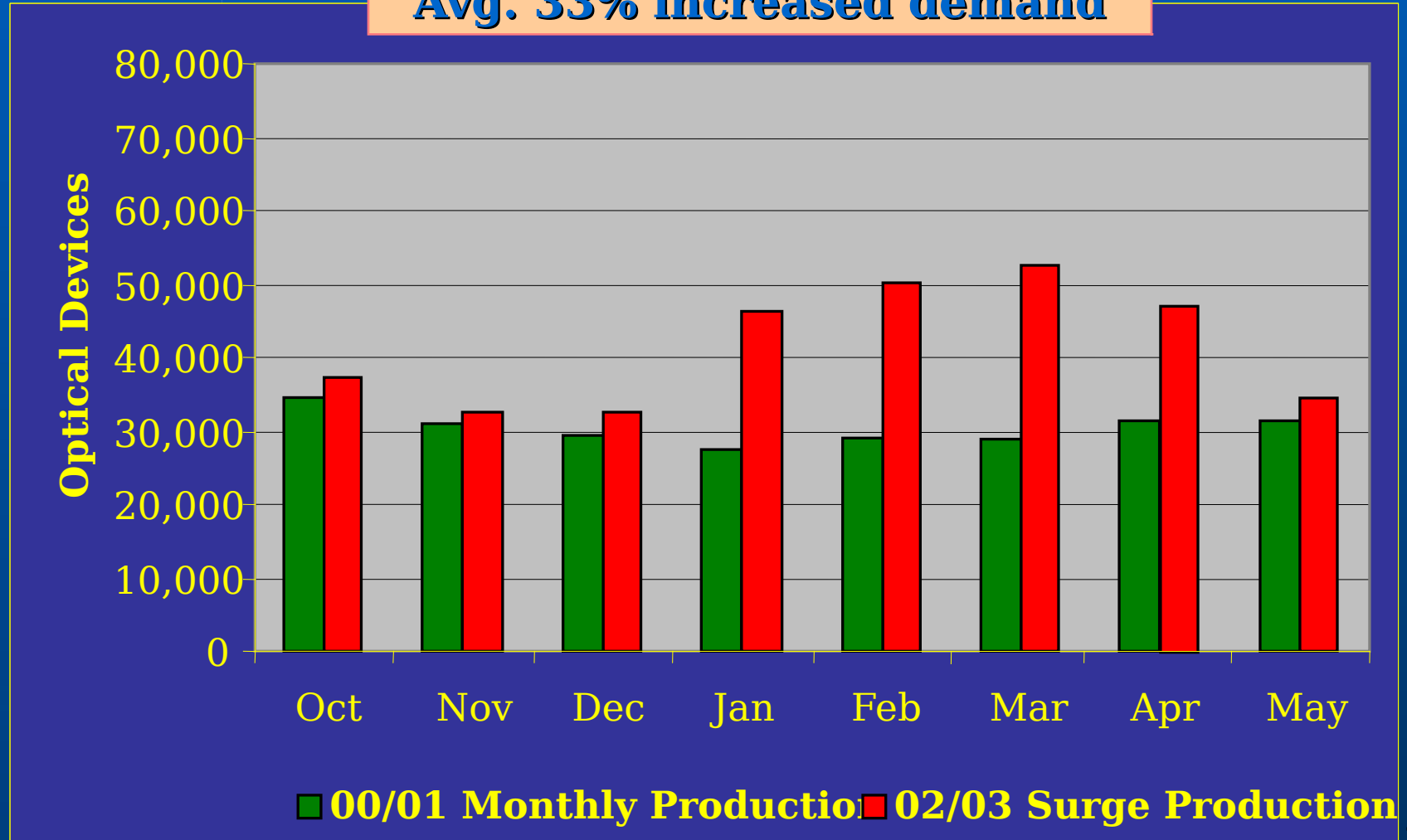
**Avg. 87.9% increased demand  
\$6.9 Million in Surge Costs over  
8 months**





# 0EF/0IF: 0FE Surge

**Avg. 33% increased demand**





# DVS Guidance

- **Tri-Service Solution**
- **Annual Vision Screening**
  - **20/40 binocular acuity or better**
- **“Show me” inspection of optical devices**
- **Tracking should be service specific**
- **\*2003 guidance**
  - **Pursue service specific solution**





# Vision Readiness Classes

## Vision Readiness Screening and Classification

**CLASS 1** - vision 20/20, all devices present

**CLASS 2** - vision 20/25 to 20/40, all devices present

**CLASS 3** - **3V: Visually** - vision worse than 20/40 *and/or*

**3O: Optically** - missing optical devices

**CLASS 4** - screening date >1 year



# Vision Readiness - Army

- VRS&C policy approved NOV '04 by DSG
- Automated tracking in implemented APR '05
- Elements:
  - Annual Visual Acuity Screening
  - Physical Verification of Required Optical Devices
  - Entry into MEDPROS

SSN	NAME	RANK	DOB	UTC	GENDER	Current Location

MEDPROS  
-> DARTS

Type in a Social Security Number or Scan ID Card

Enter SSN

Physical Data

Medical  
Readiness DataDental /Vision  
/Hearing DataTest /  
ScreeningAnnotated in  
Deployment  
Medical Record  
(DD 2766)Medical  
Equipment  
StatusPrint friendly  
version of IMR  
Record

All entered Dates should be YYYY/MM/DD Format.

## Dental

Panograph Recorded: Dental Class: Date of Exam: Dental Record on file: 

## Vision

Readiness Classification:  
1Vision Screening Date: Eye Exam Date: Two Pair Glasses: Number Needed: Protective  
Mask Inserts Distance  
Waiver: 

(Group 1: 20/20 or better

Group 2: 20/25 - 20/40

Group 3: worse than 20/40)

Distance Visual Acuity Uncorrected: Corrected: Near Visual Acuity Uncorrected: Corrected: Mission Required Contact Lenses MRCL Corrected: Military Combat Eye Protection  
(MCEP) MCEP Insert 

## Hearing

Hearing Aid with Batteries: Number of Hearing Aid Batteries needed: Single or triple flange ear plugs  
issued: Performed DD 2215 as baseline hearing test: 

Submit



[MODS HOME](#)
[MEDPROS MODULE](#)
[REPORT SELECTION](#)
[HELP](#)



Quick Report Selection:

Friday 1 PM

## Medical Operational Data System(MODS)

### MEDPROS Vision Readiness Report for Compo: 1

Total Assigned = 511720 Personnel			
Personnel Assigned	Non Deployable Count	Deployable Count	Percent Deployable
511720	393729	117991	23.1%
		Count	% of Total
Green	Vision Category 1	112503	22.0 %
	Vision Category 2	5488	1.1 %
Red	Vision Category 3V	144	0.0 %
	Vision Category 3O	6283	1.2 %
	Vision Category 4	387302	75.7 %

Report processed by: Dean Bancroft

Saturday, January 28, 2006

MEDPROS ITS Data as of (27 Jan 2006 @ 9:12 EDT)

3:14:00 PM





# AHLTA & MEDPROS

- **ALL IMR data including VR**
  - **Real time data transfer**
  - **Bi-directional**
  - **Exact mapping to MEDPROS fields**
- **Part of AHLTA build 838**
  - **Scheduled for deployment March 2006**
- **Exclusively for Mobilization processing**



# AHLTA & Vision Readiness

## 19. EYE GLASSES (2 PAIRS)

Date:

- ☐ Yes (GO)
- ☐ No (NO GO)
- ☐ NA
- ☐ Unknown (NO GO)

Number  
Required:

## 21. VISION PROTECTION

Date:

- ☐ Issued (GO)
- ☐ Not Issued (NO GO)
- ☐ NA
- ☐ Unknown (NO GO)

## 22. VISUAL ACUITY

Date:  ☐ Unknown

### Near Vision

Uncorrected: OU 20/

Corrected: OU 20/

### Far Vision

Uncorrected: OU 20/

Corrected: OU 20/

### CONTACT LENSES

Mission Required:

- ☐ Yes (GO)
- ☐ No (NO GO)
- ☐ NA

Corrected: OU 20/

## 23. PROTECTIVE MASK INSERTS

Date:

- ☐ Yes (GO IF GLASSES = YES)
- ☐ No (NO GO)
- ☐ Not Needed (GO IF GLASSES = NO)
- ☐ NA
- ☐ Unknown (NO GO)



Friday, 13 January 2006

Search All AKO This Site

Search Advanced Search

- AKO Sites
- AKO Files
- DA Pubs & Forms
- People (White Pages)

CAC Registration  
Create AKO Content

Content Directory

Pages Files Forums

- My Medical Readin...
- PDHRA Commander P...
- PDHRA Soldier Page

My Favorites [Edit]

Pages Links Files Forums

You have not bookmarked any pages.

- Army Organizations
- Self Service
- Reference

My Medical Readiness

Group Management Send Feedback Send AKO Link Add to my Favorites

MEDKN Quick Links

Are you looking for a specific medical con AKO? Visit the Medical Knowledge Netwo  
[MEDKN Quick Links Page](#)

Physical Exam Data Entry

Effective 1 December 2005, the results of the physical exam, which consist of PE, PULHES serial, physical category and physical source will be entered directly at the Point of Service (POS) into MEDPROS. The Physical Exam data will be transferred electronically to TAPDB for all components. TAPDB will in turn feed other DA source systems.

[Point of Service Physical Exam Data Entry into MEDPROS Memorandum](#)

Post Deployment Health Re-Assessment (PDHRA)



Soldiers mobilized or deployed for more than 30 days are eligible to take the Post Deployment Health Re-Assessment (PDHRA) anytime between 90 and 180 days after redeployment/de-mobilization. (Soldiers who do not complete the PDHRA during the specified timeframe may complete after 180 days). Soldiers in units will receive guidance on when and how to take the assessment from their commanders.

Provider Access:

Provider access to Soldier data and the Provider form is through TRICARE On Line:  
<http://www.tricareonline.com>, log in and then click Provider Resources on the left side.

Commander Training:

Commanders who would like to receive additional information regarding PDHRA screenings can do so by clicking the link below:

[Commander Training](#)

Soldier Training:

Soldiers who would like to receive additional information regarding PDHRA screenings can do so by clicking the link below:

[Soldier Training](#)

MEDPROS Unit Status Report

**GREEN: Vision Readiness**  
Your next Vision Readiness Screening is due 1/23/07.  
[View detailed information here.](#)

(this date will be one year from the last screening)

the new EFMB video and continuously updated content.

[Visit MEDKN EFMB](#)

My Medical Readiness

(GREEN): Deployment Status

**GREEN: Medical Non-Deployable Profile**

According to the Medical Protection System (MEDPROS), you are being reported as not having a Medical Non-Deployable Profile. If this information is incorrect, please contact your unit MEDPROS Data Entry Clerk to have your status updated.  
[View Detailed Information](#)

**GREEN: DNA**

According to the Medical Protection System (MEDPROS), you have a DNA on file. No further action is required.  
[View Detailed Information](#)

**GREEN: Dental**

Your next Annual Dental Exam is due 11/17/2006.  
[View Detailed Information](#)

**GREEN: HIV**

Your next HIV Test is due 9/12/2007.  
[View Detailed Information](#)

**GREEN: Immunization Profile**

According to the Medical Protection System (MEDPROS), you are current on all of your Routine Adult Immunizations. You can download your Electronic Immunization Record (DD Form 2766C) after clicking on the View Detailed Information link located in the Immunization Alert. If the information on the DD Form 2766C is incorrect, please contact your unit MEDPROS Data Entry Clerk to have your status updated. You may be asked to provide copies of



# Vision Readiness - Navy

## ■ *Draft Revision* - OPNAVINST 6120.3A

■ OPNAVINST 6120.3 establishes a requirement for an annual Preventive Health Assessment

### ■ **Current Language:**

- Medical readiness for deployment shall be assessed within the parameters of health and medical mobilization readiness. Any required referrals or consultations should be obtained through appropriate channels and tracked to conclusion. Medical history and administrative issues (e.g., Exceptional Family Member Program updating and pregnancy requirements) are included in this evaluation.



# Proposed Language - PHA Section OPNAVINST 6120.3A

- Visual Acuity: Refer service member to optometry if distance binocular visual acuity is worse than 20/40; this test is performed either uncorrected or with habitual distance correction if applicable. Service members who do not meet the 20/40 acuity standard are required to wear vision correction. Spectacle requirements are outlined in 8.f.4. RC service members will provide updated corrective lens prescription(s) from their civilian provider at least every two years for inclusion in their HREC.
- Applicable Testing procedures are outlined.





# Proposed Language - IMR Section OPNAVINST 6120.3A

■ Individual Medical Equipment: Service members shall present the following medical equipment at the PHA appointment for inspection:

- **Two pairs of Spectacles** - Service members who require vision correction as described in 7.c and per reference (v) will possess two pair of spectacles.
- **Ballistic Protection Optical Inserts** - Service members subject to deployment who require vision correction will possess the appropriate optical insert compatible with the Military Combat Eye Protection (MCEP) device issued to the service member.
  - MCEP spectacle with optical insert may be counted as one pair of spectacles to meet requirement 4.a.
- **Protective (Gas) Mask Inserts (PMI)** - Service members subject to deployment who require vision correction will possess the appropriate optical insert compatible with the protective mask to be used



# Vision Readiness - USAF

- **No formal stand-alone Vision Readiness program**
- **Vision readiness of Airmen is dependent upon compliance with the PHA and Individual Medical Equipment elements of IMR as defined by DoDI 6025.19, *Individual Medical Readiness* and unit-directed readiness verification.**
  - **Annual PHA includes DVA testing** *(recorded in PIMR)*
  - **Issue of required inserts** *(recorded in PIMR)*
  - **Bag drag inspections** *(no central database)*



# VR Process - USAF

- ❑ Distance VA entered at PHA or routine eye exams or screenings
- ❑ VAs entered will auto-populate the Vision Readiness component of PIMR
- ❑ Binocular distance VA  $\geq 20/50$  triggers Individual Medical Equipment requirement for PMIs
- ❑ The Issue Date field is autopopulated from SRTS
  - Date that clinic mailed/dispensed the PMI to the Airman



# VR PIMR - USAF

## Medical Equipment

### Vision Readiness

### Respiratory Readiness

### Hearing Readiness

☒ Gas Masks Inserts are required

Last DVA exam  OD OS OU

☐ Exempt / Reason

Uncor 20/400+ 20/400+ 20/400+  
Cor 20/20 20/20 20/20

### Prescription

	Sphere	Cylinder	Axis	H-prism	H-base	V-prism	V-base	Add	Seg Ht
Right (OD)	<input type="text" value="-5.50"/>	<input type="text" value="-0.75"/>	<input type="text" value="003"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Left (OS)	<input type="text" value="-4.25"/>	<input type="text" value="-1.00"/>	<input type="text" value="152"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

D. PD

### Gas Mask Inserts Ordering Information

	Order No.	Rx Date	Ordered	Frame	Tint	Lens Type	Pair	Issued
►	2028382	10/25/2004	10/25/2004	MC	CL	SVD	1	11/01/2004
	2017149	04/16/2001	09/30/2002	MC	CL	SVD	1	10/07/2002

[Query SRTS](#)

Prescription and  
ordering data  
supplied by SRTS.

Issued gas mask inserts on

Insert Type



# VR Concerns - USAF

- ❑ Lack of near VA testing
- ❑ Over-ordering of PMI
- ❑ Accuracy of reported optical readiness status
- ❑ No “Show me” inspection
- ❑ PIMR data pull from SRTS II?





# Questions

